

Amendments to the Claims:

1. (Currently amended) The method of generating a high fidelity service loads comprising the steps of:

- a). developing a service load history database including multiple time series models representative of different service load conditions;
- b). combining the multiple time series models;
- c). adjusting ~~the change~~ a parameter of each of the time series models and creating an accelerated service load model;
- d). regenerating random vibration load data based upon the accelerated service load model; and
- e). feeding the load data to a drive simulation system.

2. (Original) The method as recited in claim 1 wherein said step of developing a service load history further comprises modeling original random vibration tests in different time series models.

3. (Original) The method as recited in claim 2 wherein said step of adjusting the change in each of the time series models further comprises changing the value of σ_a^2 , where

$$f(\omega) = \frac{\Delta \sigma_a^2}{2\pi} \frac{1}{|e^{i\omega\Delta} - \phi_1 e^{(n-1)i\omega\Delta} - \dots - \phi_n|^2} \cdot \frac{\pi}{\Delta} \leq \omega \leq \frac{\pi}{\Delta}.$$

4. (Original) The method as recited in claim 3 wherein said step of regenerating the random vibration load data is based upon a recursive formula.

5. (Original) The method as recited in claim 4 wherein said step of feeding the load data

to a drive simulation system further comprises converting a digital signal to an analog signal and transmitting said analog signal to actuators.